

What is claimed is:

1. A recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing a transport stream of at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another.

2. The recording medium of claim 1, wherein the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis.

3. The recording medium of claim 2, wherein each data block represents at least an intra-coded picture of video data.

4. The recording medium of claim 3, wherein each data block represents at least one group of pictures (GOP).

5. The recording medium of claim 2, further comprising:

a navigation area storing navigation information, the navigation information including a map associated with each reproduction path, each map

providing position data for the video data of the associated reproduction path.

6. The recording medium of claim 5, wherein the navigation area includes a navigation data item, the navigation data item providing navigation information for reproducing each of the multiple reproduction paths.

7. The recording medium of claim 6, wherein the navigation area includes a navigation list, the navigation list including at least the navigation data item.

8. The recording medium of claim 7, wherein the navigation data item includes a multiple reproduction path indicator indicating that the navigation data item provides navigation information for multiple reproduction paths.

9. The recording medium of claim 6, wherein the navigation data item includes a multiple reproduction path indicator indicating that the navigation data item provides navigation information for multiple reproduction paths.

10. The recording medium of claim 1, further comprising:

a navigation area storing navigation information, the navigation information including a map associated with each reproduction path, each map providing position data for the video data of the associated reproduction path.

11. The recording medium of claim 10, wherein the navigation area includes a navigation data item, the navigation data item providing navigation information

for reproducing each of the multiple reproduction paths.

12. The recording medium of claim 11, wherein the navigation area includes a navigation list, the navigation list including at least the navigation data item.

13. The recording medium of claim 11, wherein the navigation data item includes a multiple reproduction path indicator indicating that the navigation data item provides navigation information for multiple reproduction paths.

14. The recording medium of claim 1, wherein each reproduction path represents a digital channel.

15. The recording medium of claim 1, wherein each reproduction path represents a sub-channel of an RF channel.

16. A method of recording a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

recording a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another.

17. A method of reproducing a data structure for managing reproduction

duration of at least video data representing multiple reproduction paths, comprising:

reproducing a transport stream of at least video data from the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another.

18. An apparatus for recording a data structure for managing reproduction duration at least video data representing multiple reproduction paths, comprising:

a driver for driving an optical recording device to record data on the recording medium;

a controller for controlling the driver to record a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another.

19. An apparatus for reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

a driver for driving an optical reproducing device to reproduce data recorded on the recording medium;

a controller for controlling the driver to reproduce a transport stream of at least video data from the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another.